

DETAIL ESTIMATE OF

PROPOSED ADMISTRATIVE BUILDING, PHASE-III

OF MAHAPURUSHA SRIMANTA SANKARADEVA VISWAVIYALAY,

AT ATUATIKA, RAIDONGA,NAGAON, ASSAM

CIVIL WORKS :

| Sl.No. | APWD No. | Description of works | Unit | Qty. | Rate | Contarct Rate | Amount |
|--------|----------|--|------|---------|--------|---------------|---------------|
| CPTR | 1 | EARTHWORK | | | | | |
| 1 | 1.1 | EARTHWORK IN EXCAVATION | | | | | |
| 1 | 1.1 | Earthwork in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified. | | | | | |
| | | (A) Up to a depth of 2.00m below the existing ground level. | | | | | |
| | | (a) In ordinary soil | Cum | 493.04 | 108.82 | | Rs.53,652.35 |
| 2 | 1.3 | Earth/ sand filling in plinth in layers not more than 150mm thick including necessary carriage, watering, ramming etc. complete as directed and specified including payment of land compensation, forest royalty, sales tax and other duties and taxes as may be necessary. | | | | | |
| | | (c) With river sand or silt (predominantly non plastic) by truck carriage including loading and unloading. | Cum | 1149.10 | 345.61 | | Rs.397,139.07 |
| 3 | 1.4 | Raising low site around the building with approved soil obtained from outside by truck carriage including breaking clods, dressing etc. complete including paying necessary forest royelty, sales tax, land compensation, municipal gate fees, if any monopoly duty etc. (profile measurement to be taken and 12.5% deduction for shrinkage to be made from total quantity) etc. complete as directed and specified. | | | | | |

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| | | (b) Other than Guwahati city | Cum | 11268.25 | 210.20 | | Rs.2,368,585.62 |
| CPTR | 2 | CEMENT CONCRETE WORKS | | | | | |
| | 2.1 | PLAIN CEMENT CONCRETE WORKS | | | | | |
| 4 | 2.1.1 | Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (shuttering where necessary shall be measured and paid separately). | | | | | |
| | | (b) In prop 1cement: 4 sand :8 coarse aggregate by volume | Cum | 51.12 | 3890.61 | | Rs.198,901.78 |
| 5 | 2.1.2 | Plain cement concrete floor base in prop1:3:6 laid in alternate bays as specified with coarse agg. of size 13mm to 32mm including dewatering if necessary, and curing etc. complete. | | | | | |
| | | b) 50mm thick | Sqm | 1422.00 | 253.28 | | Rs.360,164.16 |
| 6 | 2.1.3 | Providing and laying 25mm thick damp proof course with cement concrete in prop 1:1.5:3 with graded stone agg. of 10mm down nominal size including providing approved damp proof admixture in proportion as recommended by the manufacturer including curing etc. complete as directed. | Sqm | 122.73 | 181.99 | | Rs.22,336.11 |
| CPTR | 2.2 | REINFORCED CEMENT CONCRETE WORKS | | | | | |
| 7 | 2.2.1 | Providing and laying plain/reinforced cement concrete works cement, coarse sand & 20mm down graded stone aggregate including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work (form work and reinforcement will be measured and paid separately) | | | | | |
| | | (I) Using Mixer Machine | | | | | |
| | | (A) In substructure up to plinth level | | | | | |

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| | | Foundation, footing, columns with base tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100mm thick up to plinth level. | | | | |
| | | N) Without using admixture, plasticiser | | | | |
| | | b) M20 grade concrete or Prop. 1:1.5:3 | Cum | 515.48 | 6063.65 | Rs.3,125,706.83 |
| | | i) Walls (thickness not less than 100mm) including attached pillasters, buttresses, plinth and string course etc. | | | | |
| | | N) Without using admixture, plasticiser | | | | |
| | | b) M20 grade concrete or Prop. 1:1.5:3 | Cum | 357.39 | 6241.39 | Rs.2,230,612.71 |
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| CPTR | 3 | SHUTTERING WORKS | | | | |
| | 3.1 | TIMBER SHUTTERING (FORMWORK) | | | | |
| 8 | 3.1.1 | Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc., height of propping and centering below supporting floor to ceiling not exceeding 4.0M and removal of the same for in-situ reinforced concrete and plain concrete work in: | | | | |
| | 3.1.1.1 | Foundation, footings, bases of columns, pile cap, raft and mass concrete works etc. | | | | |
| | | (b) Using 25mm thick plank | Sqm | 638.01 | 252.24 | Rs.160,931.09 |
| 9 | 3.1.1.2 | Sides of tie beams, grade beams etc. at or below ground level. | | | | |
| | | (b) Using 25mm thick plank | Sqm | 970.33 | 341.90 | Rs.331,756.00 |
| 10 | 3.1.1.3 | Columns, Pillars, Posts & Strut | | | | |
| | | (a) Square, Rectangular, polygonal in plan or any shape like Tee/L etc. having plane vertical face | | | | |
| | | (ii) Using 25mm thick plank | Sqm | 936.60 | 364.01 | Rs.340,931.77 |
| | | (b) Circular or curved in plan (Using 38mm thick plank) | Sqm | 195.94 | 531.15 | Rs.104,071.41 |
| 11 | 3.1.1.4 | Sides and Soffits of Beams, beam haunchings, cantilever girders, bressumers, lintels and horizontal ties. | | | | |
| | | (a) For depth not exceeding 1.0M. | | | | |
| | | (ii) Using 25mm thick plank | Sqm | 780.45 | 202.44 | Rs.157,995.01 |
| 12 | 3.1.1.5 | Flat Surfaces such as soffits of suspended floors, roofs, landings, cantelever slabs, chajjas, balconies and the like. | | | | |
| | | (a) Floors etc. upto 200mm in thickness. | | | | |

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| | | (ii) Using 25mm thick plank | Sqm | 1494.56 | 429.93 | | Rs.642,554.25 |
| 13 | 3.1.1.7 | Sloping or Battering surfaces such as sloped slabs etc. including folded plates. | | | | | |
| | | (a) Where inclination to horizontal plane does not exceed 30o requiring shuttering only on the underside. | | | | | |
| | | (ii) Using 25mm thick plank | Sqm | 77.52 | 489.24 | | Rs.37,925.88 |
| 14 | 3.1.1.10 | Staircase with sloping or stepped soffits including risers and stringers but excluding Landing. (Using 38mm thick plank) | Sqm | 55.10 | 496.80 | | Rs.27,375.17 |
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| | 4 | MASONRY WORK | | | | | |
| 15 | 4.1.1 | Providing soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete. | | | | | |
| | | (a).Brick on flat soling. | Sqm | 2298.81 | 368.71 | | Rs.847,595.52 |
| 16 | 4.1.4 | Brick work in cement mortar with 1st class brick including racking out joints and curing complete as directed. | | | | | |
| | | (I) In Sub-structure upto plinth level including dewatering if necessary | | | | | |
| | | (b) In proportion 1:4. | Cum | 31.77 | 5860.86 | | Rs.186,198.94 |
| 17 | 4.1.8 | 1st class brick nogged wall in cement mortar including racking out joints and curing complete as directed in super structure above plinth up to 1st floor level (protruding M.S rod/Tor steel of column to be embeded in cement mortar and will be measured and paid separately) | | | | | |
| | | (A) 112mm thick brick wall | | | | | |
| | | (a) In cement mortar in proportion 1:4. | (Sqm | 1454.11 | 653.01 | | Rs.949,550.98 |
| | | | | | | | |
| CPTR | | PLASTERING AND HERITAGE FINISH | | | | | |
| | 6 | PLASTERING WORK | | | | | |
| | 6.2 | CEMENT PLASTERING | | | | | |

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| 18 | 6.2.1 | 10 mm thick Cement plaster in single coat on fair side of brick/concrete walls for interior plastering up to 1st floor level including arises or rounded angles not exceeding 80mm girth and finished even and smooth including curing complete as directed. | | | | | |
| | | b) In cement mortar 1:4 | Sqm | 1499.52 | 116.85 | | Rs.175,218.91 |
| CPTR | 18 | STEEL AND IRON WORKS | | | | | |
| | 18.1 | REINFORCEMENT | | | | | |
| 19 | 18.1.1 | Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. Code for R.C.C. work/ R.B. walling including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete. (No extra measurement for lap, hook, chair, anchor etc. will be entertained in the measurement as they are included in the rate) (Upto 1st floor level) | | | | | |
| | | a) From Primary Producer: TATA/SAIL/Jindal steel/Shyam steel/RINL | | | | | |
| | | (i) TMT Corrosion resistant steel (CRS) reinforcement bar | Qtl. | 1112.67 | 7158.90 | | Rs.7,965,493.26 |
| CPTR | 21 | PILING WORKS | | | | | |
| | 21.2 | MACHINE DRIVEN PILES | | | | | |
| 20 | 21.2.1 | Providing cast in-situ machine driven reinforced cement concrete piles of required bore-diameter, bulb diameter, lengths and with reinforcement as per specifications and drawings including using of Bentonite solution. (Reinforcement to be measured and paid seperately as per item no. 21.4.1) | | | | | |
| | | C) UNIFORM PILE | | | | | |
| | | (I) Concret garade M20 | | | | | |
| | | iii) Pile dia 400 mm | Rm | 3312.00 | 1236.74 | | Rs.4,096,082.88 |
| | 21.5 | REINFORCEMENT | | | | | |

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|-----------------------------|--------|--|------|--------|---------|--|-------------------------|
| 21 | 21.5.1 | Supplying, fitting and fixing in position reinforcement bars conforming to relevent IS code, for reinforced cement concrete works in piles including straightening, cleaning, cutting and bending to proper shapes and length as per specifications and drawings. The rings should be welded with vertical reinforcements as per specified IS codes of practice. (Inclusive of lap length, hook, chair, bend, anchor...etc) | | | | | |
| | | (A) TMT bar made of Primary producer (From Primary producer) | Qtl. | 327.79 | 7210.68 | | Rs.2,363,618.51 |
| 22 | 28.1 | Collection from the field and testing in the laboratory of undisturbed soil sample for sub-soil investigation (as per relevant I.S. code) by open drive sampler (100 mm dia. Boring) through clayey soil layer/sandy soil layer/sandy clay/sandy silt layer/clayey silt layer,conduction standard penetration test(SPT) and collection of SPT sampler,observation of ground water table,spot level survey to the bore location and carrying out R.L. from nearest B.M.,laboratory test (particle size analysis,hydrometer test,liquid limit determination,plastic limit determination,specific gravity determination,triaxal test,direct shear test,unconfined compression test,consolidation test) including preparation of sub-soil investigation report complete with necessary printing and binding (minimum 5 copies) | | | | | |
| | | A. Boring. | | | | | |
| | | (ii) Construction of 100mm machine boring (Drilling) through all types of cycle,sandy clay,silty sand,silty clay soil,excluding transportation charges. | Rm | 46.00 | 849.65 | | Rs.39,083.90 |
| TOTAL OF CIVIL WORKS | | | | | | | Rs.27,183,482.09 |

